

A NEW SPECIES OF GREVILLEA (PROTEACEAE)
FROM VICTORIA

by

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SUMMARY

Grevillea floripendula, a new species from a restricted area north of Beaufort in central-western Victoria is described, and its affinities with several related species discussed. Distribution and habitat notes are included.

DESCRIPTION

Grevillea floripendula R. V. Smith sp. nov.

Frutex magnus effusus ad 1 m altus \times 3 m latus. Caules principes atque rami semi-prostrati vel decumbentes partibus infernis sed extrema ramulorum \pm erecta. Partes caulium infernae mediaeque glabrae ad sparsim pubescentes, partes supernae dense pubescentes tomento pilorum \pm patentium crispatorum tortorumve. Folia paulo remota, profunde dissecta in 5-7 lobis primariis oblongis quae 3-5 lobulos secundarios breves \pm triangulares aculeatos ferunt. Lobae primariae secundariaeque foliorum de forma et amplitudine et numero valde variabiles. Folia matura clare viridia supra subnitentia vel glabra vel pilis parvis, crispatis tortisve, sparsim conspersa; infera pallide virens haud nitentia, pilis crispatis tortisve leniter conspersa. Florae racemis pendulis, secundis, 1-4 cm longis. Racemi teretes tenues \pm glabros pedunculos 1-5 cm longos terminantes. Rachis racemi dense hirsuta. Bractae florales vel ellipticae vel ovatae, vel ovato-rhombeae ad ovato-oblongae, (1.5-) 2-2.5 mm longae; planae, curvatae vel undulatae. Perianthium breve latumque, 5-6 mm longum (a medio tore ad summum arcum) extra dense hirsutum, pilis \pm procumbentibus incanis; griseo-viride ad malvino-griseum nervis longitudinalibus malvinis vel purpureis; intra glabrum, inferne viride vel flavo-malvinum vel malvinum etc. superne atropurpureum ad arcum perianthii. Torus valde obliquus, nectario prominente \pm semi-annulari incrassato. Stipes 1.5-2.5 mm longus. Ovarium prominente stipitatum, dense hirsutum pilis longis ferrugineis \pm patulis, curvatis vel parum tortis. Stylus 7-9 mm longus, vivus pallide-flavus vel viridi-flavus vel roseus vel pallide ruber, siccitate nigrescente vel fuliginosus; glaber praeter basi ubi sparsim ad dense hirsutus. Fructus prominente stipitatus, 8-12 mm longus, 4-6 mm latus, extra dense hirsutus pilis mixtis brevioribus, rectoribus, \pm procumbentibus atque multo longioribus, irregulariter patentibus. Color principalis fructi griseus ad griseo-malvinus, cum vittis maculisve atropurpureis in superficiebus dorsalis lateralisque.

Shrub 0.3-1 m high and 1.5-3 m across. Main stems and branches semi-prostrate or decumbent. Lower and middle stems glabrous to sparsely pubescent, dark reddish or purplish-red; upper branches reddish, greyish-brown, or yellowish, becoming densely pubescent with a tomentum of whitish curled and twisted hairs. Tips of branches and young developing leaves pale ferruginous to reddish-purple. *Leaves*: petioles 3-5 (-8) mm long; blades broad- to oblong-triangular in outline, \pm truncate to cuneate at the base, 1.5-4 cm long \times 1.5-5 cm wide with length $>$ to $<$ width, \pm deeply divided into 3-7 \pm oblong *primary lobes* (0.5-) 1-2 (-2.5) cm long bearing 3-5 short \pm triangular *secondary lobes*, each of which terminates in a short rigid slender prickle; lobing very variable. Upper surface of mature leaves bright green, subshiny, glabrous or with sparse, small, curled and twisted hairs; lower surface pale green, dull, sprinkled with similar hairs. Young leaves more strongly pubescent. *Flowers* in pendulous, secund, short and broad, occasionally somewhat elongated racemes (1-) 2-3 (-4) cm long \times 2-3 cm wide, terminating a slender terete peduncle (1-) 1.5-3 (-5) cm long. *Peduncle* glabrous or occasionally sparsely pubescent, usually with a single bract arising from well above to well below its midpoint. Peduncle bent

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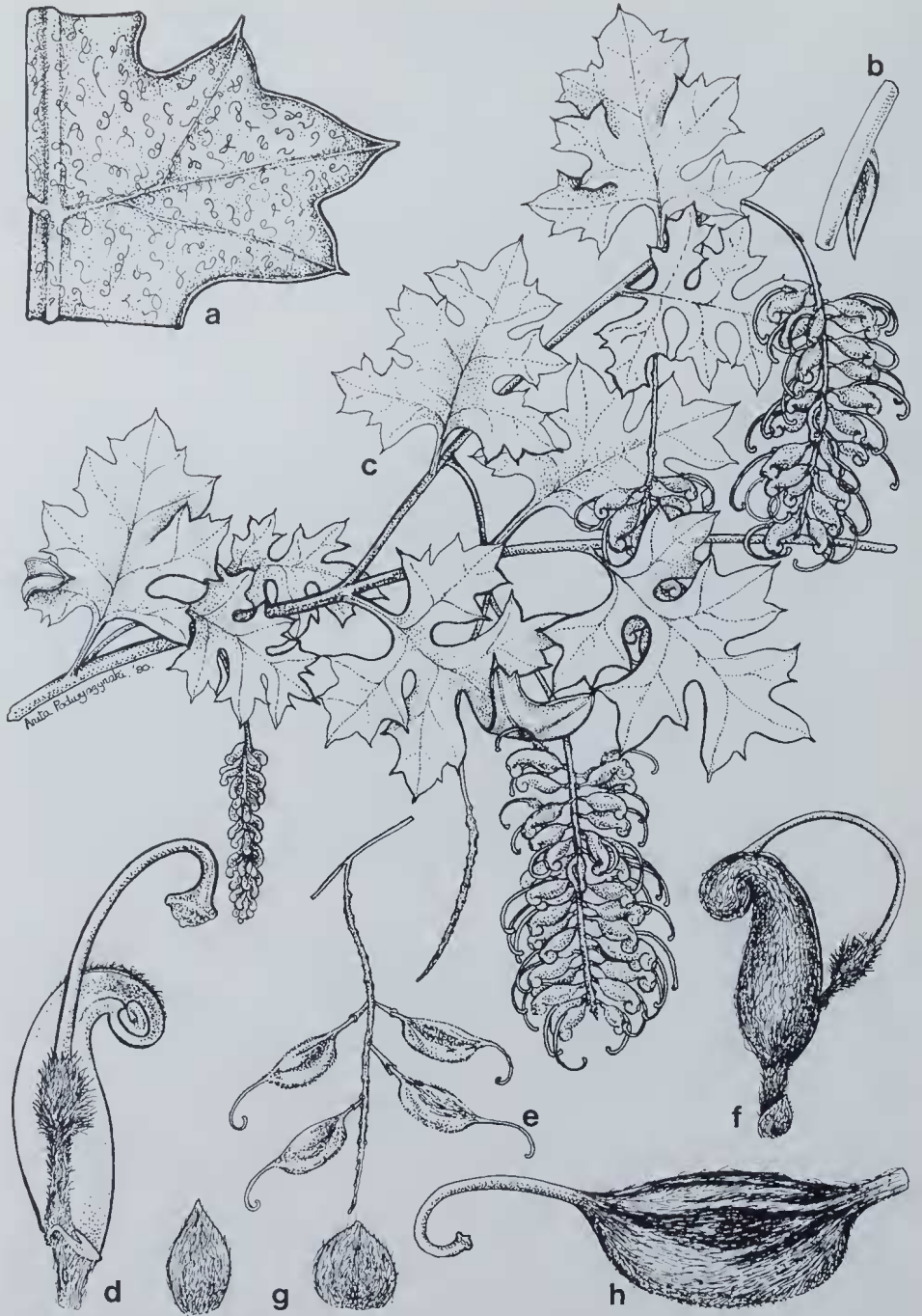


Fig. 1. *Grevillea floripendula*. a—lower surface of leaf showing venation and twisted hairs, x 3. b—portion of peduncle showing bract, x 6. c—habit, x 1. Note pendulous racemes. d—section through mature flower showing oblique torus, nectary, stipitate ovary, style and pollen presenter, x 5. e—fruiting raceme, x 1. f—young flower, x 4. Note floral bract at base of pedicel. g—floral bracts, x 8. h—mature fruit showing dark longitudinal patches on dorsal and lateral surfaces, x 3. a-d, f, and g, from Smith 76/23 (MEL); e and h from Smith 76/55 (MEL).

or geniculate at the bract and bearing a single raceme, or occasionally paired racemes. *Bract* (1-)2-3(-5) mm long, usually strongly infolded, sometimes flattish, narrow lanceolate with a usually acute, sometimes trifid tip; tip occasionally expanded into an incipient leaf with a small lobed lamina. *Rhachis* densely hairy with curved, curled or twisted hairs. *Floral bracts* flat, gently curved or undulate, spreading, elliptic, ovate, ovate-rhombic, to ovate-oblong 1.5-2(-2.5) mm long \times 1-1.5 mm wide, from about as wide as long to longer than wide, bluntly pointed to acute, densely hairy on back, glabrous on front, greenish-yellow to reddish or purplish-tinged, from caducous (falling early from flowers) to persistent in fruit. *Pedicels* spreading at right angles to rhachis, 1.5-3 mm long, equalling or exceeding floral bracts, hairy. *Perianth* 5-6 mm long (from midpoint of torus to top of arch) \times 2-3 mm wide (widest point of unopened perianth); densely hairy outside with predominantly appressed hairs mixed with irregularly spreading hairs, glabrous inside; outer surface greenish-grey to purplish-brown, with longitudinal nerves of mauve or purple, the colour partly obscured by the greyish-white hairs on body and light ferruginous hairs on limb; inner surface greenish to mauve in lower part, dark- or blackish-purple towards and around arch. *Anthers* 0.5-0.8 mm long, clear lemon yellow. *Torus* very oblique, with a prominent, thickened, semi-annular to \pm horseshoe-shaped nectary. *Stipe* (1.5-)2-2.5 mm long, densely hairy with longish, appressed to spreading, pale grey hairs; stipe arising close to the summit of the torus and from slightly shorter to considerably longer than the ovary. *Ovary* prominently stipitate, densely hairy with long, erect to spreading, straight to curved or slightly twisted, pale, ferruginous hairs. *Style* 7-9 mm long, pale yellow, greenish-yellow, pale pink, or light red, curved, glabrous except at base where sparsely to strongly hairy, hairs occasionally extending up style for several mm. *Pollen presenter* (stigmatic disc) very oblique with a broad, strongly crenulate, greenish-yellow base rising to a low oblique cone with a pale yellowish stigmatic tip. *Fruit* prominently stipitate (8-)9-11(-12) mm long \times 4-6 mm, densely hairy outside with a mixture of shorter, \pm appressed to spreading, straight to waved hairs and much longer, spreading, curved to gently twisted hairs; hair colour grey to mauvish-grey, but blackish-purple in longitudinal bands or patches on the dorsal and lateral (and sometimes ventral) surfaces. *Seed*: body elliptic in outline, 5-7 mm long \times 2-3 mm wide, pale yellowish-brown to blackish-purple, glabrous, smooth or minutely wrinkled, compressed, gently convex on back, \pm flattened or depressed on front, surrounded by a thin, pale yellow wing from 0.5 mm wide to almost obsolete on the lateral margins, to 1-2 mm wide at top and bottom.

TYPE COLLECTION:

Ben Major Forest Reserve, gentle W. slopes of ridge, c.16 km N. of Beaufort, and c.300 m E. of Beaufort-Amphitheatre road, 37°18'S; 143°23'E, Central-western Victoria, R. V. Smith 76/23 (flowering collection), 15.x.1976 (Holotype: MEL 569949. Isotypes: MEL 571180-83, and to be distributed to A, AD, BRI, CANB, HO, K, NSW, PERTH).

PARATYPE:

Ibidem, R. V. Smith 76/55 (fruiting collection from same plant as holotype), 15.xii.1976 (MEL 569950 and 571184-86, duplicates to be distributed as for isotypes).

SELECTED SPECIMENS EXAMINED:

Victoria (central-western)—Ibidem for holotype: R. V. Smith 76/24 (MEL 571188-89, A, AD); R. V. Smith 76/25 (MEL 571190-91; BRI, HO, K, NSW). Ibidem for paratype: R. V. Smith 76/56 (MEL 571194-95, A, CANB, HO,

PERTH); R. V. Smith 76/57 (MEL 571196-97, PERTH). Near Troy's Reservoir, c.4 km N. of Beaufort, 37°24'S; 143°21'E, R. V. Smith 65/181, 9.xi.1965 (MEL 571203-05, AD, CANB, NSW). Slopes above Cockney Gully, 6.4-8 km N. of Beaufort, 37°21'S; 143°20'E, R. V. Smith 70/39, 16.xi.1970 (MEL 571198-200, AD, CANB, NSW); Ibidem, R. V. Smith 70/42, 16.xi.1970 (MEL 571201-02, A, HO, K, NSW). Crown land E. of Beaufort-Amphitheatre road, c.6.4-8 km N. of Beaufort, Mrs J. Reid 6.xi.1970 (MEL 571192-93).

DISTRIBUTION AND HABITAT

Apparently confined to a very restricted area in central-western Victoria where it is known to the author from three locations north of Beaufort and east of the Beaufort-Amphitheatre road. Molyneux (1975) also cites Mount Ben Major, a few kilometres to the north. Occurs on Ordovician formation having shallow soils with quartz fragments and outcrops on or near the surface, in several plant associations which include the following species—*Eucalyptus dives*, *E. goniocalyx*, *E. obliqua*, *E. macrorhyncha*, *Acacia aculeatissima*, *A. gunnii*, *Correa reflexa*, *Daviesia ulicifolia*, *D. virgata*, *Dillwynia cinerascens*, *D. sericea*, *Epacris impressa*, *Gompholobium huegelii*, *Goodenia lanata*, *Leptospermum myrsinoides*, *Oxylobium procumbens* and *Pultenaea pedunculata*.

DISCUSSION

Grevillea floripendula shows closest affinities with *G. steiglitziana* N. A. Wakefield, *G. dryophylla* N. A. Wakefield and *G. microstegia* W. M. Molyneux. From all of these species it differs most conspicuously in its pendulous racemes borne on elongated, slender, terete, wiry, glabrous or near-glabrous peduncles. It differs also from each of the above in a combination of other characters including both floral and tomentum details.

The floral bracts of *G. floripendula* show a marked similarity to those of *G. steiglitziana*. In both species they are flat or gently curved or undulate, and vary in shape from ovate to elliptic-oblong; cf. those of *G. dryophylla* and *G. microstegia* which are generally smaller, strongly concave, thickened in the lower part, from ovate-rhombic to broadly rhombic, and often considerably broader than long. Although resembling *G. steiglitziana* in floral bracts, *G. floripendula* can be distinguished readily by the pendulous racemes, the shorter styles (7-9 mm long; cf. (14-)15-20(-21) in *G. steiglitziana*) and the tomentum (strongly curved, waved, twisted and spreading; cf. closely appressed and "directional" in *G. steiglitziana*).

Molyneux (1975) considers that *G. microstegia* shows closest affinities with *G. floripendula* (referred to as "the undescribed *Grevillea* from the Ben Major area") and gives a comparative table of differences. After making detailed observations and measurements on all 4 species discussed in my present paper I consider that *G. microstegia* is, instead, most closely related to *G. dryophylla* on floral and bract characters. For *G. microstegia*, Molyneux gives the length of the floral bracts as "0.25 mm" and "c.0.5 mm" and states that the ovary stipe is inserted \pm centrally on the torus. However, in specimens (including type) held at the National Herbarium of Victoria, I find that the floral bract length ranges from 0.5-1.3 mm while the ovary stipe arises on the upper part of the torus just below the summit, essentially as in *G. dryophylla*.

ACKNOWLEDGEMENTS

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REFERENCE

Molyneux, W. M. (1975). A new *Grevillea* species from western Victoria. *Muelleria* 3: 141-145.

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